Stay Tuned Crystal Radios & Tube Radios

Crystal Radio Plans and Circuits

and parts of books

This section contains 174 articles at the present time
(articles are numbered)
Many articles have multiple plans!

Information Donated In Part By The Following Persons
Mike Tuggle (Hawaii), Richard O'Neill, Lou Blasco, Mike Peebles, Andy Klute, Evan Haydon, David Porter, Kent Stevens, Harlan Higman and his Father, Steve Myers, Ben Tongue, Brian Hawes (England), Lincoln Rivas (Chile, South America), Phil Vanheurck, Brian Butler (Canada) Andre Frechette VE2FAB, Terry Hicks, Rod Wall (Australia), Kenneth Ladd

We thank you for sharing your radio plans!!!

If you have any plans to share, please email me.
Email address at bottom of page

"New" Plans Just Added Section

Click Here

Spanish Language Plans

Esquemas en lengua española

Click Here

Department of Commerce, Bureau of Standards Circulars

#1

Department of Commerce, Bureau of Standards Circular #120

"Construction And Operation Of A Very Simple Radio Receiving Equipment"

(158k file) "pdf" format
Courtesy of Lou Blasco

Lower quality, but here if you have to have "doc" files
#120 **(892k file) "doc" format**

#2

Department of Commerce, Bureau of Standards Circular #121

"Construction And Operation Of A Two-Circuit Radio Receiving Equipment With Crystal Detector"

(98k file) "pdf" format
Courtesy of Lou Blasco

Lower quality, but here if you have to have "doc" files
#121 (757k file) "doc" format

#3

Department of Commerce, Bureau of Standards Circular #133

"Description And Operation Of An Electron-Tube Detector Unit For Simple Radio Receiving Outfits"

Page 1	Page 3	Page 4	Page 4b
Page 5	Page 6	Page 7	Page 8
Page 9	Page 10	Page 11	Page 12
Page 13	Page 14	Page 15	Page 16
Page 17	Page 18	Page 19	Page 20
Page 21			

(page 2 is a blank page)

Courtesy of Steve Myers

#4

Department of Commerce, Bureau of Standards Circular #137

"Auxiliary Condensers And Loading Coil Used With Simple Homemade Radio Receiving Outfits"

Page 1	Page 3	Page 4	Page 5
Page 6	Page 7	Page 8	Page 9
Page 10	Page 11	Page 12	Page 13
Page 14	Page 15	Page 16	Page 17
Page 18	Page 19		

(page 2 is a blank page)

Courtesy of Steve Myers

#5

Department of Commerce, Bureau of Standards Circular #141

"Description And Operation Of An Audio-Frequency Amplifier Unit For Simple Radio Receiving Outfits"

Page 1	Page 3	Page 4	Page 5
Page 6	Page 7	Page 8	Page 9
Page 10	Page 11	Page 12	Page 13
Page 14	Page 15	Page 16	Page 17
Page 18		Page2 (missed)	

(page 2 is a blank page)

Courtesy of Steve Myers

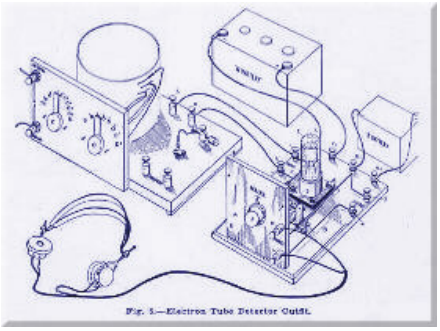
#6

Farm Economy Supplement

Published early 20's
This radio is almost the same as #120 above,
but more detail and upgradable to a tube radio

Title Page

page33	page34	page35	page36
page37	page38	page39	page40
page41	page42		



#7

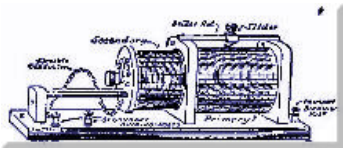
Construction and Operation of a Simple Homemade Radio Recieving Outfit

This radio is almost the same as above
"Department of Commerce, Bureau of Standards Circulars"
PDF Format

#8

The Boy Electrician

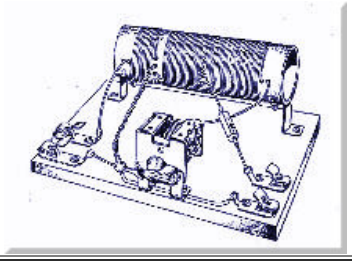
(1. 5 meg in DOC format)



9

Allied Knight-kit

This is an excellent project for a beginner to build
(837k)



#10

How to Build An Efficient Crystal Receiver

[How to Build An Efficient Crystal Receiver Page1]

[How to Build An Efficient Crystal Receiver Page2]

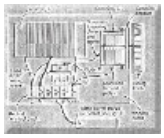
[How to Build An Efficient Crystal Receiver Page3]

[How to Build An Efficient Crystal Receiver Page4]

[How to Build An Efficient Crystal Receiver Page5]

#11

Building An Elementary Receiver



Page 1	Page 2	Page 3	Page 4
Page 5	Page 6	Page 7	Page 8
Page 9	Page 10	Page 11	Page 12
Page 13	Page 14	Page 15	Page 16
Page 17	Page 18	Page 19	Page 20
Page 21	Page 22	Page 23	Page 24
Page 25	Page 26	Page 27	

#12

Duel Rectification With Crystals Page 1

Duel Rectification With Crystals Page 2

#3

The Flextal Crystal Set

Removed , Sorry

#14

Foxhole Emergency Radios Page 1

Foxhole Emergency Radios Page 2

#15

Heathkit CR1

#16

Simple Improved Crystal Set Page 1

Simple Improved Crystal Set Page 1

#17

A Match Box Radio That Actually Works

#18

"Loud" Crystal Radio

#19

3 Miller Drawings Page 1
3 Miller Drawings Page 2
3 Miller Drawings Page 3

0

My Crystal Set That Gets DX

Page 1

#21

Wide Range Bandpass Crystal Tuner

Page 1 Page 2

#22

A Conelrad Monitor

Page 1

#23

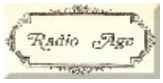
Channel Tuned Crystal Receiver

Page 1 Page 2

#24

How I Invented The

Crystal Detector



Page 1 Page 2

#25

Assymbling A Simple Crystal Set

Page 1 Page 2

#26

A Modern Crystal Set

Page 1

#27

Link_Coupled Crystal Set

Page 1 Page 2

#28

The Crystal Radio Makes a Come-Back

Page 1 Page 2

#29

A Modern Midget Set

Page 1 Page 2

#30

Modern Crystal Set

Page 1

#31

A Super Selective Crystal Receiver

Page 1

#32

A Super Sensitive All-Wave Crystal Set

Page 1 Page 2

#33

Germanium Crystal Receivers Pick-Up European Broadcasts

Page 1 Page 2

#34

High-Efficiency Crystal Receiver

Page 1

#35

DX Crystal Radio Receiver

Page 1 Page 2

#36

Selective, Fixed Detector Crystal Set

Page 1 Page 2

#37

The Crystal Detector

Page 1 Page 2 Page 3 Page 4

#38

Tuggle Notes

Page 1 Page 2 Page 3

#39

Two Timer

Page 1 Page 2

#40

When Tubes Beat Crystals: Early Radio Detectors

Page 1	Page 2	Page 3
Page 4	Page 5	Page 6

#41

A Modern Crystal Set

Page 1 Page 2 Page 3

#42

Oat Box Crystal Radio Set

Page 1 Page 2

Version#2

Page 1 Page 2 Page 3

#43

Pencil Crystal Radio

JPG File

Page 1

#44

Harlan Higman and his Fathers Radios

Page 1	Page 2	Page 3	Page 4
Page 5	Page 6	Page 7	Page 8
Page 9	Page 10	Page 11	Page 12
Page 13	Page 14	Page 15	Page 16
Page 17	Page 18	Page 19	Page 20
Page 21			

#45

Fountain Pen Radio

JPG File

Page 1

#46

Make The Parts For These Crystal Sets

JPG Files

Page 1 Page 2

#47

Loop Crystal Set

JPG Files
Page 1 Page 2

#48
"Tom Thumb" Crystal Set
JPG Files
Page 1

#49
Two Low-Cost Crystal Sets
JPG Files
Page 1 Page 2

#50
Powerful Crystal Set #1
This is not the same set as Powerful Crystal Set #2 below
It's claim is it is so powerful it will heat up the crystal on local stations! (OK?)
JPG File(s)
Page 1 Page 2

#51
A "P.W." Ultra Crystal Set
Donated by Brian Hawes

JPG File(s)
Page 1 Page 2 Page 3

#52
Three Germanium Diode Crystal Receivers For Beginners

JPG File(s)
Page 1 Page 2

#53
Build A Modern Crystal Set

Page 1	Page 2	Page 3	Page 4	Page 5

#54
Tapped Coil Crystal Set
"Allied Radio Kit"

JPG File(s)
Page 1 Page 2 Page 3

#55
Tapped - Coil Crystal Receiver and Battery - Operated Amplifier

JPG File(s)
Page 1 Page 2 Page 3

#123
The last word in Crystal Sets ....the first word in radio

JPG File(s)
Page 1 Page 2 Page 3 Page 4

added 12 Dec 04

#124

Small Fry Crystal Set

JPG File(s)
Page 1

added 12 Dec 04

#125

A Crystal Set for the Boy Builder

JPG File(s)
Page 1 Page 2 Page 3

added 12 Dec 04

#126

How To Build A Loud Speaker Crystal Receiver

JPG File(s)

Page 1	Page 2	Page 3	Page 4
Page 5	Page 6	Page 7	Page 8

added 5 Jan 04

#127

How To Build A Long Distance Crystal Radio Set

JPG File(s)

Page 1 Page 2 Page 3 Page 4

These images are a little hard to read, but not bad.
From 1923 by Leon Lambert
They were scanned a little higher resolution to help.

#128

Building A Crystal Set For The Children

JPG File(s)
Page 1

added 24 Jan 04

#129

Classic Crystal

JPG File(s)
Page 1 Page 2

added 24 Jan 04

#130

Crystal Detectors And How They Work

JPG File(s)
Page 1 Page 2 Page 3

added 24 Jan 04

#131

Grandpa's Wisker

JPG File(s)
Page 1 Page 2 Page 3 Page 4

added 24 Jan 04

#132

Build The See-Through Crystal Radio Receiver

JPG File(s)
Page 1 Page 2

added 24 Jan 04

#133

Glass-Jar Crystal Receiver

JPG File(s)

Page 1

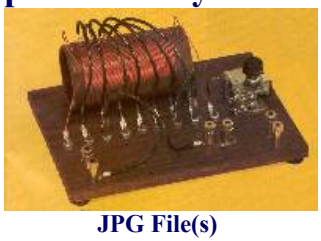
Donated by Brian Butler

Original image has been altered slightly to remove "noise" in the image.
This makes the image smaller and load faster.

added 24 Jan 04

#134

Tapped Coil Crystal Radio



JPG File(s)

Page 1 Page 2 Page 3 Page 4 Page 5

added 31 Jan 04

#135

Halyard's "Worth-while" Crystal Set

The Coil Is Wound In The Legs Of A Table!
Combo Table Radio!
JPG File(s)

Page 1 Page 1a Page 2 Page 3 Page 4

(Page 1a is the bottom of Page 1)

Donated by Brian Hawes

added 8 Feb 04

#136

Inductively Coupled Crystal Receiving Set

JPG File(s)

Page 1	Page 2	Page 3	Page 4
Page 5	Page 6	Page 7	Page 8
Page 9			

Donated by Brian Butler

Added 8 Feb 04

#137

Crystal-Type Broadcast Receiver

JPG File(s)

Page 1 Page 2 Page 3

Added 16 Feb 04

An error was found in the original circuit by Mike Peebles, so an "updated" version of the page is offered here.

JPG File

Page 4

Donated by Mike Tuggle

Added 21 Aug 04

#138

Akatuki Data Sheet

JPG File(s)

Page 1

Added 16 Feb 04

#139

Building A Crystal Set

JPG File(s)

Page 1 Page 2 Page 3

Donated by Brian Butler
Added 14 Mar 04

#140

Vest Pocket Crystal Receiver

JPG File(s)

Page 1 Page 2
added 3 Apr 04

#141

Umbrella Crystal Radio

A loop set
This is a copy of the original patent of this device from 1928
I purchaced the originals patent records in April of 2004
JPG File(s)

Page 1 Page 2 Page 3 Page 4 Page 5 Page 6
added 3 Apr 04

#142

Electronics and Hobbyiests

JPG File(s)

Page 1
added 20 Apr 04

Donated by Brian Butler

#143

Cigar Box Radio

JPG File(s)

Page 1 Page 2
added 20 Apr 04

#79

Assymbly and Wiring Instructions for a Miller

JPG File(s)
Page 1 Page 2 Page 3

Miller Drawings and Ads and Info.
#144
JPG File(s)
Page 1 Page 2 Page 3

added 12 June 04

#146
Super-Sensitive

Vest Pocket Crystal Radio

(This is not the same "Vest Pocket" plans show elsewhere on this page)
JPG File(s)
Page 1 Page 2

added 12 June 04

#147

Selective, Fixed Detector Crystal Set

JPG File(s)
Page 1 Page 2

This set of plans is also below, but is a better copy
added 18 Jun 04

#148
Crystal Set Built Into Toy Telephone
JPG File(s)
Page 1

added 18 Jun 04

#149
Tiny Crystal Set Built in Toy Bank
JPG File(s)
Page 1 Page 2 Page 3
added 18 Jun 04

#150
Loudspeaker Crystal Receiver
This set is really a 1 tube radio that can be converted to a crystal set
JPG File(s)
Page 1 Page 2 Page 3 Page 4
added 18 Jun 04

#151
Crystal Set In A Bedside Lamp
I would not recommend making this radio. It is posted as reference only.
Could be dangerious.
JPG File(s)
Page 1 Page 2 Page 3 Page 4
added 25 July 04

#152
Space-Age Crystal Set
JPG File(s)
Page 1 Page 2 Page 3
added 25 July 04

#153
How To Build "Free-Power" Radios
JPG File(s)
Page 1 Page 2 Page 3

Donated by Andre Frechette VE2FAB
added 21 August 04

#154
Build a Modern Crystal Set
JPG File(s)

Page 1 Page 2 Page 3 Page 4
added 21 August 04

#155

Build a Crystal Set
The Original Solid-State Radio

JPG File(s)
Page 1 Page 2
added 21 August 04

#156

Transistorized Loop Crystal Receiver

JPG File(s)
Page 1 Page 2 Page 3 Page 4
added 21 August 04

#157

Sun Powered Radio

JPG File(s)
Page 1 Page 2 Page 3 Page 4
added 21 August 04

#165

A Solderless B.C. Crystal Receiver

JPG File(s)
Page 1
added 15 Oct 04
Donated by Terry Hicks

#166

A Modern Midget Set

JPG File(s)
Page 1

added 24 Oct 04
Donated by Terry Hicks

#167

A Matchbox Crystal Set

PDF File
Page1

added 17 July 2005
Donated by Rod Wall

#168

Novel Crystal Set With Viriometer-Tuning

PDF File
Page1

added 17 July 2005
Donated by Rod Wall

#169

DX Crystal Radio Receiver

by Joseph Amarose

PDF File(s)
Page 1

Donated by Kenneth Ladd
added 03 Oct 05

#170

Boy's Book of Crystal Sets

by W. J. May

PDF File(s)
Page 1

Donated by Lou Blaso
added 09 Oct 05

#171

#96 Crystal Set Conctruction"

by B. B. Babani

PDF File(s)
Page 1

Donated by Lou Blaso
added 09 Oct 05

New Plans Section!!!!

New !

#172

Cystal Receivers For Broadcast Reception

Book

PDF File(s)
(almost 5 meg download)
Page 1

Donated by Kenneth Ladd
added 08 Jan 06

New !

#173

Radio Receivers - Cystal Receiver

JPG File(s)
Page 1 Page 2

me
added 14 Jan 06

New !

#173

Subminature Portable Crystal Radio Receiver

This is a patent and not "plans"
PDF Format Only

Donated by Ken Ladd
12 March 2006

Spanish Language Plans

Planes Españoles De La Lengua

#56

Eficiente receptor a galena para telefonos

Efficient galena receiver for phones
Radio Plans in Spanish (donated by Lincoln Rivas, Chile, South America)

JPG File(s)

Page 1	Page 2	Page 3

Donated by Lincoln Rivas (Chile, South America)

#57

Un Excelente Receptor a galena

An Excellent Galena Receiver
Radio Plans in Spanish (donated by Lincoln Rivas, Chile, South America)

JPG File(s)

Page 1	Page 2	Page 3	Page 4
Page 5	Page 6	Page 7	Page 8

Donated by Lincoln Rivas (Chile, South America)

#57

Reception - Distintos Desinos De Receptores A Galena

Reception - Different Designs Of Galena Receivers
Radio Plans in Spanish (donated by Lincoln Rivas, Chile, South America)

JPG File(s)

Page 1	Page 2	Page 3	Page 4

Donated by Lincoln Rivas (Chile, South America)

#120

Receptores a Galena de Caracteristicas Especiales

JPG File(s)

Page 1	Page 2	Page 3	Page 4	Page 5
Page 6	Page 7	Page 8	Page 9	

Donated by Lincoln Rivas (Chile, South America)

#121

Receptores Selectivos a Galena

JPG File(s)

Page 1	Page 2	Page 3	Page 4	Page 5
Page 6	Page 7	Page 8	Page 9	

Donated by Lincoln Rivas (Chile, South America)

#122

El Reino de la Galena

JPG File(s)

Page 1	Page 2	Page 3	Page 4	Page 5
Page 6	Page 7	Page 8	Page 9	Page 10

Donated by Lincoln Rivas (Chile, South America)

#145

Receptor a Galena

JPG File(s)
Page 1 Page 2

Donated by Lincoln Rivas (Chile, South America)
added 12 June 04

#158

Construccion De Un Receptor De Cristal

(Construction Of A Crystal Receiver)

JPG File
Page 1

Donated by Lincoln Rivas (Chile, South America)
added 26 Sept 04

#159
Detector De Cristal
(Crystal Detector)

JPG File(s)
Page 1 Page 2

Donated by Lincoln Rivas (Chile, South America)
added 26 Sept 04

#160
Realizacion Practica De Un Receptor A Galena

JPG File(s)
Page 1 Page 2 Page 3

Donated by Lincoln Rivas (Chile, South America)
added 26 Sept 04

#161
Recepcion Con Galena
(Reception With Galena)

JPG File(s)
Page 1 Page 2

Donated by Lincoln Rivas (Chile, South America)
added 26 Sept 04

#162
Receptor A Galena Para Principiantes

JPG File(s)
Page 1 Page 2

Donated by Lincoln Rivas (Chile, South America)
added 26 Sept 04

#163
Receptor A Galena Sensible Y De Alcance

JPG File(s)
Page 1

Donated by Lincoln Rivas (Chile, South America)
added 26 Sept 04

#164
Receptor Miniatura A Galena

JPG File(s)
Page 1 Page 2

Donated by Lincoln Rivas (Chile, South America)
added 26 Sept 04

#165
DX Crystal Radio Receiver
by Joseph Amarose

PDF File(s)
Page 1

Donated by Kenneth Ladd
added 03 Oct 05

Harvey Harbicht's

"Cool Radio Plans"

Thanks to Rick (sorry, don't know last name) for finding all lost files

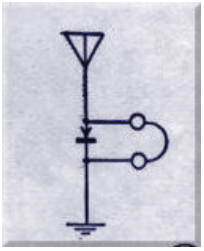
Click Here to go to "Cool Radio Plans" Entire Archive New!!

Special thanks to Mick South (Michael) for the help in collecting 1/2 of these plans before they were lost!!

This is roughly 50% of the archives

58

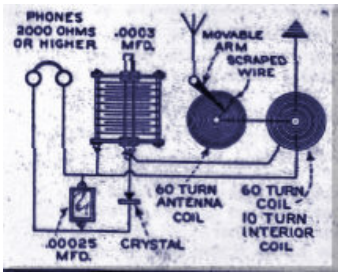
Crystal Radio Circuits 101



Page 1	Page 2	Page 3	Page 4
Page 5	Page 6	Page 7	Page 8

#59

1250 Miles with a crystal detector



JPG File(s)
Page1

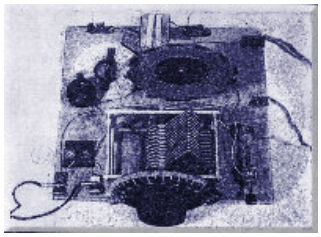
#60

Bare Bones Crystal Set

JPG File(s)
Page 1 page2

#61

A Beginners Broadcast



JPG Files(s)
Page1 Page2

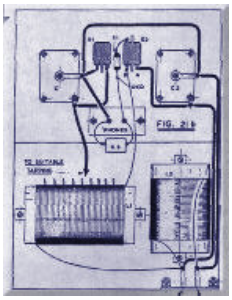
#62

A Beginners Crystal Set

JPG File(s)
Removed, Sorry

#63

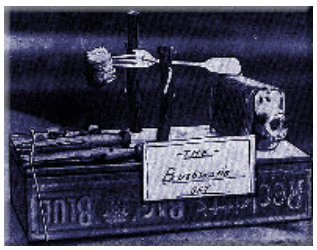
A Boys Book of Crystal Sets



Page 1	Page 2	Page 3	Page 4
Page 5	Page 6	Page 7	Page 8
Page 9	Page 10	Page 11	Page 12
Page 13	Page 14	Page 15	Page 16
Page 17			

#64

A Bush Mans Crystal Set



JPG File(s)
Page 1

#65

A Card-Board Tube Radio

JPG File(s)

Page 1 Page 2 Page 3 Page 4

#66

Circuit Circus

JPG File(s)

Page 1	Page 2	Page 3
Page 4	Page 5	Page 6

#67

Cockaday Four-Circuit Tuner

JPG File(s)

Page 1

#68

Hi-Fi Tuner

JPG File(s)

Page 1

#69

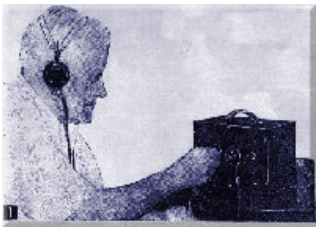
Dual Rectifications With Crystals

JPG File(s)

Page 1

#70

Emergency Twin-Crystal Radio Receiver



JPG File(s)

Page 1 Page 2

#71

Free Power

JPG File(s)

Page 1

#72

Crystal Set Has Full-Wave Rectification

JPG File(s)

Page 1

#73

The Junior Radio Guild

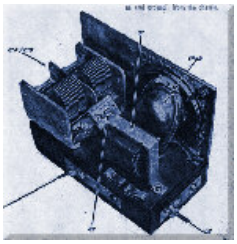
Gernback

Gif File(s)

Page 1 Page 2

#74

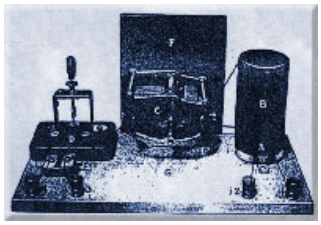
High-Power Crystal Set



JPG File(s)
Page 1 Page 2 Page 3

#75

How to build a Crystal Set



JPG File(s)
Page 1 Page 2 Page 3

#76

An Inexpensive Crystal Set

JPG File(s)
Page 1 Page 2

#77

Magnetically Tuned Crystal Set

JPG File(s)
Page 1

#78

Build A MatchBox Crystal Radio

JPG File(s)

Page 1	Page 2	Page 3	Page 4
Page 5	Page 6	Page 7	

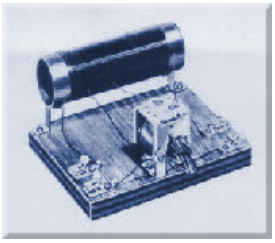
#80

A Modern Crystal Set

JPG File(s)
Page 1

#81

An Operational Crystal Radio



JPG File(s)
Page 1

#82

Powerful Crystal Set #2

This is not the same set as Powerful Crystal Set #1 above
JPG File(s)
Page 1 Page 2

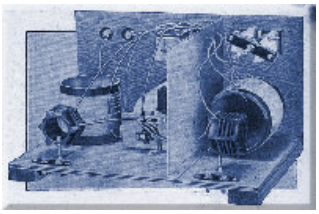
#83

A Radio Set for 50 Cents

(not today's prices!!)
JPG File(s)
Page 1 Page 2

#84

The "By Request"



JPG File(s)
Page 1 Page 2 Page 3

#85

Operation Crystal

JPG File(s)
Page 1

#86

Short-Cuts in Radio

JPG File(s)
Page 1

#87

Simple Crystal Detector

JPG File(s)
Page 1

#88

Suggested Circuits

JPG File(s)
Page 1 Page 2

#89

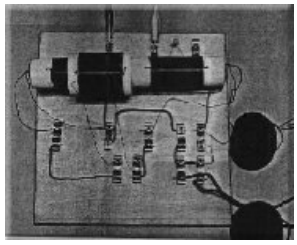
A Super-Sensitive All-Wave Crystal Set

JPG File(s)

Page 1 Page 2

#90

Build a Veriometer Radio

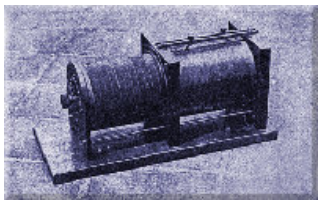


JPG File(s)

Page 1 Page 2

#91

Construction of a Radio Receiving Apparatus



JPG File(s)

Page 1	Page 2	Page 3
Page 4	Page 5	Page 6

#92

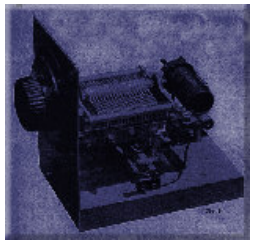
The Early Days Of Radio

JPG File(s)

Page 1	Page 2	Page 3	Page 4

#93

Modern Crystal Radio Receiver



JPG File(s)
Page 1 Page 2 Page 3

#94

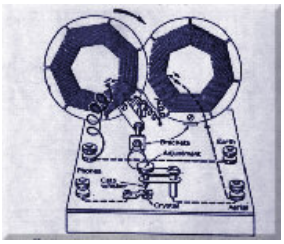
Old-Time Flavor Crystal Radio

JPG File(s)

Page 1	Page 2	Page 3	Page 4

#95

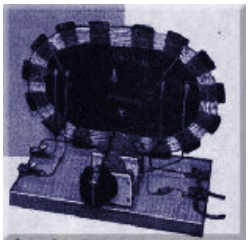
Antique Radio



JPG File(s)
Page1

#96

Progressive Crystal Receiver



JPG File(s)
Page1

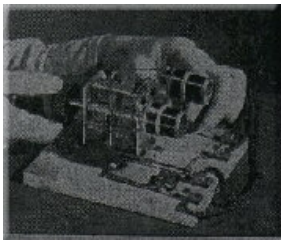
#97

Build a Crystal Set
The Original Solid State Radio

JPG File(s)
Page 1 Page 2

#98

Selective, Fixed Crystal Set



JPG File(s)
Page 1 Page 2

#99

A Simple Radiophone Receiver

JPG File(s)
Page 1 Page 2

#100

Super Crystal Radio

JPG File(s)
Page1

#101

Barebones Crystal Set

JPG Files(s)
Page1 Page2

#102

Nostalgia For The Future

JPG Files(s)

Page 1	Page 2	Page 3	Page 4

#103

For The Experminter

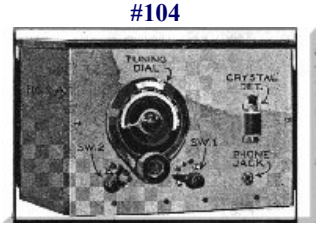
JPG Files(s)

Page 1

Popular Mechanics

All JPG File(s)

#104



Crystal Receiver built with junk-box parts
Feb 1937
page 1 page 2

#105

Seven Crystal Sets for Beginners
July 1941
page 1 page 2

#106

Crystal Receiver Is Built Into a Headset Unit
June 1941
Page 1

#107

"Big Town" Bike Receiver
Dec 1943
Page 1

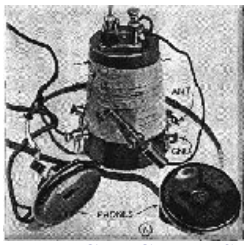
#108

Two Modern Crystal Sets
Feb 1943
Page 1
This article is missing pages 2 and 3
If you have them, please let me know!

#109

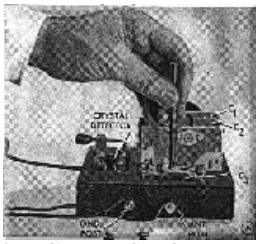
Make The Parts For These Crystal Sets
Jan 1944
Page 1 **Page 2**

#110



Two Low Cost Crystal Sets
June 1945
Page 1 **Page 2**

#111



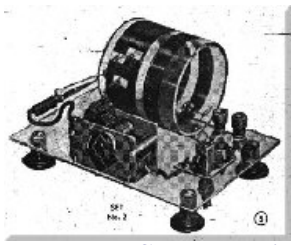
Sharp-Tuning Crystal Set for Experimenters
Nov 1945
Page 1

#112

"Tom Thumb" Crystal Set

Sep 1945
Page 1

#113

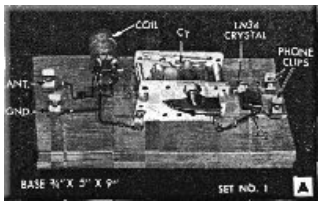


Two Ultra-Modern Crystal Receivers for Experminters
Sep 1946
page 1 Page 2

#114

Tapped Coil Crystal Receiver and Battery_Operated Amplifier
Apr 1948
Page 1 Page 2 Page 3

#115



Three Germanium Diode Crystal Receivers for Beginners...
Dec 1950
Page 1 Page 2

#116

Low-Cost Receivers for Junior Builders
June 1951
Page 1 Page 2 Page 3

Radio Electronics

JPG File(s)

#117

Crystal Set Built Into a Toy Phone
June 1947
Page 1

#118

High Power Crystal Set

August 1960
Page 1 Page 2 Page 3

#119

Build a Ocean-Spanning Crystal Receiver

July 1981
Page 1 Page 2 Page 3

End of Harvey's old site

Old Transistor Radio Plans

Philmore Portable Transistor Radio Kit

PDF Format
Page 1
New

VHF Ear

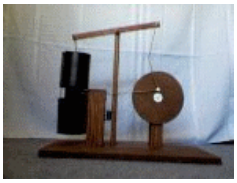
Listen to Airport Towers
(Note: I'm not sure they still are on this freq. Let me know!)
Page 1 Page 2
New

I'm looking for old plans to post!!

If you have any, please email me!!!

Build a Stirling Hot Air Engine

From Tin Cans!!!



Click Here

Return to "Stay Tuned " Home Page

© 1999-2010 Darryl Boyd, All rights reserved

Copyright Notice:

My website is copyrighted. This includes all images, text, drawings.
If you are thinking of downloading my copyrighted items and selling them on ebay (or anywhere) keep this in mind,
I monitor ebay for such violations. I will pursue the issue with ebay and in the courts if necessary.
I do not furnish them for your gain from my hard work.

TOPICCRAZE
VOTE FOR MY SITE!

Search This Site

Google™ Google Search

WWW http://www.crystalradio.net

Send Email To:

b o y d @ b o y d h o u s e . c o m

Because of antispam techniques, you can not "cut and paste" the above text

---

Return to "Stay Tuned " Home Page

We have made every effort to ensure that the information provided on this website is accurate and up to date.
All information on this website is informational only and no guarantees to the accuracy of any of the projects
or circuits on this site or calculators. If you find something you feel is inaccurate, please inform us by e-mail. Be sure to provide a thorough argument to support your case. Confirmed changes will be made as quickly as possible.

The images on this website are protected by copyright. They are the property of the owner of this website and may not be used without the owners permission. Please don't use the images made by us on this website without permission.